**SEE THE CHANGE** PHYSICS MAKES

**Juneau Community Charter School**

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This is my fourth year at the Juneau Community Charter School as the middle school science teacher. I am in a unique position in the JSD in that I have students from all three grades in my classes every year. For this reason, I am developing a three-year looping curriculum that a student can join in year A, B, or C. It's been a challenge, but I think **See the Change** will be a huge help in this regard.

I have been using **STC** for just a couple weeks, but so far,

**"I have been impressed with the lessons I've used."**

I started last week with their introductory unit on measurement, and it was easy to see the trajectory of each lesson, what was needed for the activities, how it will be best to get kids engaged, and how to make it work in a classroom. (I realized that some of the lessons would work well in my 6th and 7th grade math classes. And they did--the kids liked the change of pace and I plan to continue to use STC in math when it makes sense to do so.)

**See the Change** lessons have multiple options for most labs so that the teacher can pick the activity that fits best for their situation. For the lessons I used there was an "open inquiry" option that was about as open as one could imagine, and a "structured inquiry" option that provided steps to follow and much more scaffolding. I tend toward the middle, and handouts and activity guides have been easy to download and adapt. The variety of options provided for each lesson is a big help, and I find myself taking a little from here, a little from there, and coming up with lessons that work well for my style and my students.

**What I like about the lessons I've used is that they are clearly designed with student inquiry at the foundation.** Most of the time when I adapt something from a lesson book or teacher website I need to do some heavy lifting to make it genuine inquiry. With **STC** I still do some adapting, but not much; and the varied lesson options stimulate my creativity."

## "What's really stuck out, however, is that the lessons so far have been a lot of fun."

Today's lesson was about finding volume using displacement. This isn't a novel idea for a science classroom, but seeing the way that **STC** presented the lesson got me thinking about how I typically do it. I took their structured inquiry lesson and opened it up a bit by asking students how they might best use the equipment provided to measure volume by displacement.

**The students had all sorts of ideas!**

…label the buckets like a graduated cylinder and use it like one; fill the bucket to the top and then measure the water that spills out when the object is placed in the bucket; drill a hole in the bucket and use that hole to focus the overflow into a graduated cylinder and then measure the volume of water that spills out; fill a 5 gallon gatorade cooler up about ⅔ of the way, mark the water line, place the object in the bucket, and then drain the water off into a graduated cylinder until the water is back to the original level.

These were all workable strategies that showed the students understood the concept,

**...and they all came from the students!"**

*"I am looking forward to continuing with STC. I am very thankful to the folks who have made it possible for us to try this program in Juneau. Feel free to contact me if you have any questions or need help convincing anyone."*

*-Steve Morley*